

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference M/45007-PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/000460	International filing date (day/month/year) 21/01/2004	(Earliest) Priority Date (day/month/year) 24/01/2003
Applicant DE NORA ELETTRODI S.p.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☐ the text is approved as submitted by the applicant.
☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 6
☒ as suggested by the applicant.
☐ as selected by this Authority, because the applicant failed to suggest a figure.
☐ as selected by this Authority, because this figure better characterizes the invention.
- b. ☐ none of the figures is to be published with the abstract.

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The invention concerns a novel adjustable elastic element (19) for forcing the surfaces of expandable-type anodes for diaphragm chlor-alkali cells. In an embodiment of the invention such element consists of a U-shaped elastic sheet provided with at least one adjusting mechanism comprising both one collar (29)

which fastens the elastic sheet through openings obtained in the sheet itself and one gear (23) connectable to a removable external tool consisting of a handle and a shaft. By turning the tool, a rotation of the gear is produced, in its turn acting on the collar controlling the span of the anode surfaces. Such span is freely adjustable in order to establish a predetermined controlled gap between anode and finger-supported diaphragm surfaces, or alternatively in order to bring such surfaces in contact without introducing however a useless and hazardous compression.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C25B11/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C25B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 848 085 A (HERAEUS ELEKTROCHEMIE GMBH) 17 June 1998 (1998-06-17) column 2, line 6 - line 16 column 2, line 36 - column 3, line 27 column 4, line 47 - column 5, line 38 figures 1,2	1, 2, 19, 20
A	US 3 941 676 A (ELEMER NELSON MACKEN) 2 March 1976 (1976-03-02) column 5; claim 1 figures 1-7	1
A	US 4 162 953 A (ORONZIO DE NORA) 31 July 1979 (1979-07-31) column 7, line 58 - column 8, line 8 figure 9	1
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

8 July 2004

Date of mailing of the international search report

15/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Desbois, V

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/000460

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 448 664 A (TADAO IKEGAMI) 15 May 1984 (1984-05-15) column 2, line 13 - line 51 figures 4,5 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
T/EP2004/000460

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0848085	A	17-06-1998	DE 19647190 A1	28-05-1998
			EP 0848085 A1	17-06-1998
			NO 973778 A	18-05-1998
<hr/>				
US 3941676	A	02-03-1976	AU 8679175 A	26-05-1977
			BR 7507903 A	24-08-1976
			CA 1067455 A1	04-12-1979
			DE 2558243 A1	08-07-1976
			ES 443621 A1	01-08-1977
			FR 2296030 A1	23-07-1976
			GB 1519317 A	26-07-1978
			IT 1052447 B	20-06-1981
			JP 1009625 C	26-08-1980
			JP 51105979 A	20-09-1976
			JP 54044271 B	25-12-1979
			NL 7513450 A	29-06-1976
			ZA 7507048 A	27-10-1976
<hr/>				
US 4162953	A	31-07-1979	IT 1114623 B	27-01-1986
			BE 868548 A1	16-10-1978
			CA 1092055 A1	23-12-1980
			DE 2828892 A1	11-01-1979
			FR 2401239 A1	23-03-1979
			GB 2001102 A , B	24-01-1979
			JP 1059983 C	25-08-1981
			JP 54014374 A	02-02-1979
			JP 56002155 B	17-01-1981
			JP 1149439 C	14-06-1983
			JP 56055581 A	16-05-1981
			JP 57043152 B	13-09-1982
			NL 7806896 A	03-01-1979
			SE 7805928 A	02-01-1979
			ZA 7803174 A	27-06-1979
<hr/>				
US 4448664	A	15-05-1984	JP 59017762 U	03-02-1984
			CA 1222219 A1	26-05-1987
			DE 3323803 A1	09-02-1984
			FR 2530672 A1	27-01-1984
			GB 2124257 A , B	15-02-1984
<hr/>				